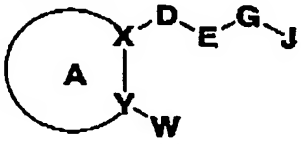
CLAIMS

1. An agent to increase cauda equina blood flow comprising a prostaglandin-like compound having weak blood pressure-lowering effect, excluding limaprost.

2. The agent according to Claim 1 wherein the prostaglandin-like compound is EP2 and/or EP3 agonist.

3. The agent according to Claim 1 which improves one or more selected from lumbago, lower limb pain, lower limb numbness, intermittent claudication, bladder and rectal disorder and sexual dysfunctions.

4. The agent according to Claim 1 wherein the prostaglandin-like compound is a compound represented by formula (I)



(I)

wherein ring A is 5 or 6 membered ring which may comprise at least one hetero atom selected nitrogen, oxygen and sulfur, and may have a substituent(s),

X and Y are each independently nitrogen or carbon, D is hydrocarbon group which may have a substituent(s),

E is a bond, oxygen or optionally oxidized sulfur,

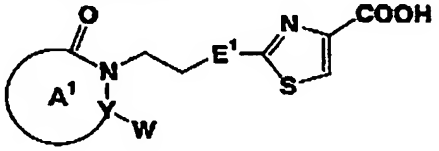
G is a bond, hydrocarbon group which may have a substituent(s) or hetero ring which may have a substituent(s),

J is acidic group which may be protected,

W is hydrocarbon group which may have a substituent(s),

a salt thereof, an N-oxide thereof, a solvate thereof or prodrug thereof, or a cyclodextrin clathrate thereof.

5. The agent according to Claim 4 wherein the compound represented by formula (I) is a compound represented by (I-1)



(I-1)

wherein ring A^1 is 5 or 6 membered nitrogen-containing mono-heterocyclic ring may have a substituent(s), and the ring A^1 may comprise, in addition, nitrogen, oxygen and/or sulfur,

E^1 is optionally oxidized sulfur,

Y is nitrogen or carbon,

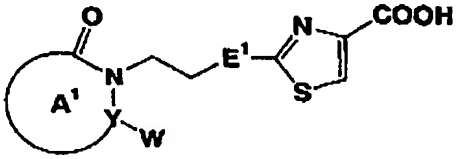
W is hydrocarbon group which may have a substituent(s).

6. A medicament combined a prostaglandin-like compound having weak blood pressure-lowering effect, excluding limaprost, with one or more selected from prostaglandins, prostaglandin derivatives, nonsteroidal anti-inflammatory drugs, vitamins, muscle relaxants, antidepressants, nitric oxide synthase inhibitors, aldose reductase inhibitors, poly ADP-ribose polymerase inhibitors, excitatory amino acid receptor antagonists, radical scavengers, astrocyte modulators, phosphodiesterase inhibitor and immunosuppressive drugs.

7. A method for increasing cauda equina blood flow, which comprises administering to a mammal an effective amount of a prostaglandin-like compound having weak blood pressure-lowering effect, excluding limaprost.

8. Use of a prostaglandin-like compound having weak blood pressure-lowering effect, excluding limaprost, for the manufacture of an agent to increase cauda equina blood flow.

9. A compound represented by formula (I-1)



(I-1)

wherein ring A^1 is 5 or 6 membered nitrogen-containing mono-heterocyclic ring may have a substituent(s), and the ring A^1 may comprise, in addition, nitrogen, oxygen and/or sulfur,

E^1 is optionally oxidized sulfur,

Y is nitrogen or carbon,

W is hydrocarbon group which may have a substituent(s),

a salt thereof, an N-oxide thereof, a solvate thereof or prodrug thereof, or a cyclodextrin clathrate thereof.

10. The compound according to Claim 9, which is selected from

2-{[2-((4S)-4-{(1E,3R)-3-[1-(4-fluorobutyl)cyclobutyl]-3-hydroxy-1-propenyl}-2-oxo-1,3-oxazolidin-3-yl)ethyl]sulfanyl}-1,3-thiazole-4-carboxylic acid (compound 8-1),

2-[(2-{(4S)-4-[(1E,3R)-8-fluoro-3-hydroxy-4,4-dimethyl-1-octenyl]-2-oxo-1,3-oxazolidin-3-yl}ethyl)thio]-1,3-thiazole-4-carboxylic acid (compound 8-6),

2-{[2-((4S)-4-{(1E,3R)-3-hydroxy-3-[1-(3-methoxypropyl)cyclobutyl]-1-propenyl}-2-oxo-1,3-oxazolidin-3-yl)ethyl]sulfanyl}-1,3-thiazole-4-carboxylic acid (compound 32-2),

2-{[2-((4S)-4-{(1E,3R)-3-[1-(2-cyclohexylethyl)cyclobutyl]-3-hydroxy-1-propenyl}-2-oxo-1,3-oxazolidin-3-yl)ethyl]sulfanyl}-1,3-thiazole-4-carboxylic acid (compound 32-14),

2-{[2-((4S,5S)-4-{(1E)-3-hydroxy-3-[1-(3-methoxypropyl)cyclobutyl]-1-propenyl}-5-methyl-2-oxo-1,3-oxazolidin-3-yl)ethyl]sulfanyl}-1,3-thiazole-4-carboxylic acid (compound 34-6) and

2-[(2-{(4S,5S)-4-[(1E)-4-hydroxy-4-methyl-1-nonenyl]-5-methyl-2-oxo-1,3-oxazolidin-3-yl}ethyl)sulfanyl]-1,3-thiazole-4-carboxylic acid (compound 45).

11. (2E)-7-{(1R,2R)-2-[(1E,3S,5S)-3-hydroxy-5-methyl-1-nonenyl]-5-oxocyclopentyl}-2-heptenoic acid (compound 24),

(2E)-7-{(1R,2R,3R)-3-hydroxy-2-[(1E,3S,5S)-3-hydroxy-5-methyl-1-undecenyl]-5-oxocyclopentyl}-2-heptenoic acid (compound 25),

(2E)-7-{(1R,2S)-2-[(1E,3S,5S)-3-hydroxy-5-methyl-1-nonenyl]-5-oxo-3-cyclopenten-1-yl}-2-heptenoic acid (compound 26),

2-[(2-{(1R,2R)-2-[(1E,3S,5S)-3-hydroxy-5-methyl-1-nonenyl]-5-oxocyclopentyl}ethyl)sulfanyl]-1,3-thiazole-4-carboxylic acid (compound 30),

2-[(2-{(1R,2R)-2-[(1E,3R)-3-hydroxy-4,4-dimethyl-1-octenyl]-5-oxocyclopentyl}ethyl)sulfanyl]-1,3-thiazole-4-carboxylic acid (compound 30-1),

7-{(1R,2R,3R)-3-hydroxy-2-[(1E,3S,5S)-3-hydroxy-5-methyl-1-nonenyl]-5-oxocyclopentyl}-6-oxoheptanoic acid (compound 31),

2-[(2-{(1R,2R)-2-[(1E)-5-cyclohexyl-4-hydroxy-4-methyl-1-pentenyl]-5-oxocyclopentyl}ethyl)sulfanyl]-1,3-thiazole-4-carboxylic acid (compound 53) or

3-{2-[((2R)-2-{(1E,3R)-3-[1-(4-fluorobutyl)cyclobutyl]-3-hydroxy-1-propenyl}-5-oxo-1-pyrrolidinyl)methyl]-1,3-thiazol-4-yl}propanoic acid (compound 76),

a salt thereof, an N-oxide thereof, a solvate thereof or prodrug thereof, or a cyclodextrin clathrate thereof.